

# Based Material Line Up



## S1141 150/S0401 150

### 1. CORE (C-STAGE)

Thickness		ply-up	RC (%)	Dk				Df			
mm	mil			1 GHz	3 GHz	5 GHz	10 GHz	1 GHz	3 GHz	5 GHz	10 GHz
0.050	0.002	1*106	70	3.98	3.93	3.79	3.75	0.0210	0.0210	0.0210	0.0210
0.076	0.003	1*1080	63	4.09	4.09	4.01	3.98	0.0196	0.0193	0.0189	0.0187
0.100	0.004	1*2116	46	4.30	4.26	4.26	4.24	0.0174	0.0174	0.0173	0.0173
0.130	0.005	1*2116	54	4.25	4.25	4.23	4.23	0.0183	0.0179	0.0183	0.0183
0.150	0.006	1*1506	43	4.42	4.37	4.37	4.35	0.0158	0.0153	0.0153	0.0153
0.180	0.007	1*7628	43	4.46	4.52	4.46	4.45	0.0175	0.0153	0.0153	0.0153
0.200	0.008	1*7628	46	4.25	4.21	4.19	4.17	0.0185	0.0190	0.0185	0.0185
0.230	0.009	2*2116	49	4.27	4.20	4.18	4.18	0.0170	0.0170	0.0170	0.0170
0.250	0.010	2*2116	55	4.21	4.17	4.15	4.13	0.0184	0.0177	0.0181	0.0181
0.280	0.011	2116+1080+2116	63	4.10	4.07	4.02	3.97	0.0190	0.0192	0.0197	0.0195
0.300	0.012	2*1506	43	4.42	4.37	4.37	4.35	0.0158	0.0153	0.0153	0.0153
0.330	0.013	1080+7628+1080	44	4.10	4.05	4.00	4.00	0.0170	0.0170	0.0170	0.0170
0.360	0.014	2*7628	42	4.47	4.53	4.46	4.45	0.0176	0.0155	0.0158	0.0158
0.380	0.015	2*7628	43	4.42	4.37	4.35	4.35	0.0158	0.0153	0.0153	0.0153
0.410	0.016	2*7628	46	4.40	4.35	4.33	4.33	0.0160	0.0153	0.0153	0.0155
0.430	0.017	7628+1080+7628	40	4.20	4.15	4.10	4.10	0.0160	0.0160	0.0160	0.0160
0.460	0.018	7628+1080+7628	43	4.20	4.15	4.10	4.10	0.0140	0.0140	0.0140	0.0140
0.510	0.020	7628+2116+7628	40	4.30	4.25	4.20	4.20	0.0150	0.0150	0.0150	0.0150
0.530	0.021	3*7628	41	4.40	4.33	4.33	4.33	0.0160	0.0153	0.0155	0.0153

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0.610	0.024	3×7628	43	4.40	4.33	4.33	4.33	0.0160	0.0153	0.0155	0.0153
0.710	0.028	4×7628	42	4.40	4.33	4.33	4.33	0.0160	0.0153	0.0155	0.0153
0.790	0.031	4×7628	43	4.40	4.33	4.33	4.33	0.0160	0.0153	0.0155	0.0153
1.0 1/1	0.037	5×7628	41	4.40	4.33	4.33	4.33	0.0160	0.0153	0.0155	0.0153
1.2 1/1	0.045	6×7628	45	4.40	4.33	4.33	4.33	0.0160	0.0153	0.0155	0.0153
1.5 1/1	0.057	8×7628	42	4.40	4.33	4.33	4.33	0.0160	0.0153	0.0155	0.0153
1.6 1/1	0.060	8×7628	44	4.40	4.33	4.33	4.33	0.016	0.0153	0.0155	0.0153

## 2. PREPREG (B-STAGE)

Glass style	RC (%) Nominal	Thickness		Dk				Df			
		mm	mil	1 GHz	3 GHz	5 GHz	10 GHz	1 GHz	3 GHz	5 GHz	10 GHz
106	71%	0.053	2.10	3.96	3.92	3.88	3.72	0.0211	0.0208	0.0205	0.0208
1080	65%	0.084	3.32	4.09	4.01	4.01	3.98	0.0196	0.0193	0.0188	0.0187
1080	68%	0.094	3.69	4.02	3.96	3.92	3.83	0.0199	0.0193	0.0193	0.0188
2116	50%	0.117	4.61	4.28	4.24	4.24	4.22	0.0178	0.0172	0.0179	0.0176
2116	53%	0.127	4.99	4.24	4.28	4.28	4.26	0.0182	0.0175	0.0180	0.0177
2116	58%	0.145	5.70	4.17	4.15	4.11	4.11	0.0185	0.0183	0.0183	0.0182
1506	45%	0.163	6.42	4.39	4.33	4.32	4.32	0.0165	0.0155	0.0154	0.0153
1506	48%	0.176	6.93	4.28	4.24	4.24	4.22	0.0178	0.0172	0.0179	0.0176
7628	43%	0.199	7.82	4.42	4.37	4.37	4.35	0.0158	0.0153	0.0153	0.0155
7628	45%	0.208	8.20	4.39	4.33	4.32	4.32	0.0165	0.0155	0.0154	0.0153
7628	50%	0.236	9.31	4.28	4.24	4.24	4.22	0.0178	0.0172	0.0179	0.0176

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## 3. REMARK

- 1) Test by SPDR method
- 2) The data above show actual values and are not guaranteed.
- 3) RC\* is not common type for reference.
- 4) Last update: July, 2018